

ABSTRACT OF THE DISCLOSURE

A sample holder comprising a material that is functionally transparent to wavelengths of light that are important to visual analysis of the sample, and to wavelengths of light that are important to spectroscopic analysis of the sample. Embodiments of the invention are amenable to total
5 internal reflection of light useful in spectroscopic analysis. Specific materials and configurations are described. Methods and apparatuses using such sample holders for measurement of sample properties, including cancer screening of cervical samples, are described.